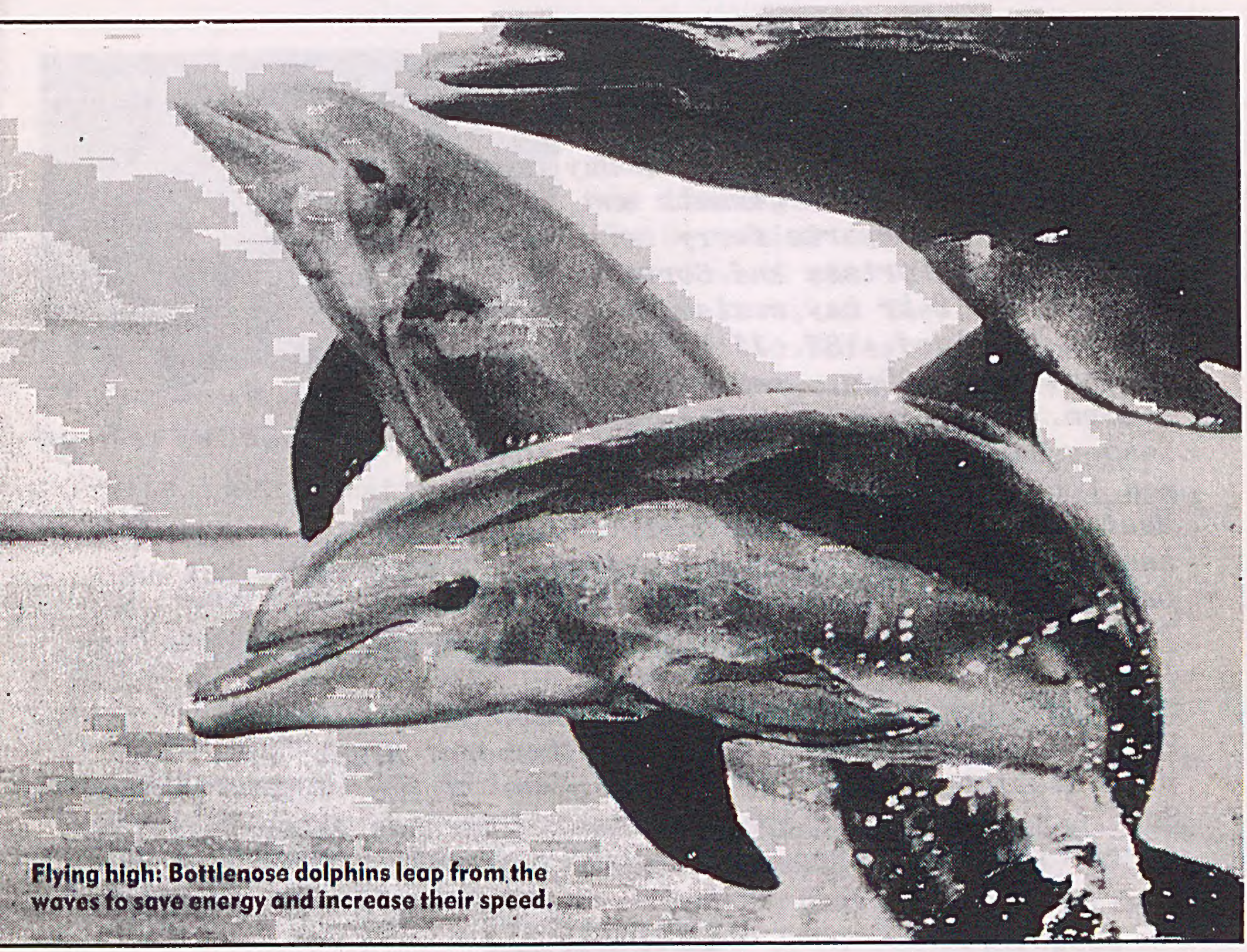
Field Naturalists' Club
of Ballarat *Inc.* *February 1999*



Flying high: Bottlenose dolphins leap from the waves to save energy and increase their speed.

DARLINGS OF THE BAY

Meet them on our Bay cruise !

almost certainly !

Dolphin Quiz on page 7

Meetings are held at the Ballarat Horticulture centre, corner of Gregory and Gillies Streets, ie. the NW corner of the Botanic Gardens, commencing at 7-30pm

Excursions depart from Creswick Plaza at 9-30 am, unless specified otherwise.

Committee; Claire Dalman (President).. , Greg Binns (Vice President).. , Pat Murphy (Secretary).. , John Gregurke (Treasurer).. , Brian Andrews (Editor).. , Helen Burgess, Lyndsay Fink, Brian Gavin, Carol Hall, Margaret Rotherham.

Postal Address: PO Box 328W, Ballarat West,3350

DIARY DATES

Fri 5th Feb. Meeting. *Marine Biology Topic.* Marine Research Group F.N.C.V.

Sun 7th Feb. Excursion. *Our Day On The Bay. See dolphins, seals, gannets and lots more! SS. JJ Farnsworth departs ferry terminus, Queenscliff at 12-00 for Portsea and Sorrento. MV Nepean departs for 2 hr bay cruise at 1-30pm. Tea and coffee provided. SS. JJ Farnsworth departs from Sorrento at 5-00pm , arriving at Queenscliff at 5-40pm. Bargain price of only $15!*
Leader Margaret Rotherham ph 5331 4054

Wed 17th Feb. Excursion. *Lake Burrumbete. Meet 4-00pm. Turn in at North Shore Caravan Park, take left hand turn to headland near racecourse. Take meal, but not barbecue!*

Tues 2nd Mar. Committee Meeting. Margaret Rotherham's, , 7-30pm.

Mar 5th - 8th. *VFNCA, AGM & campout, Sale, Gippsland.*

Fri 12th Mar. Meeting. *AGM and Members' Night; short presentations by members of the club. Theme: Inland Waters.*

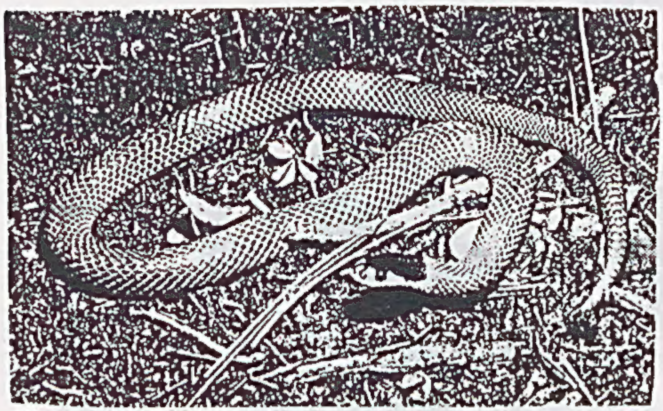
Sun 14th Mar. Excursion. *Central Highlands Water Reservoirs - a selection of venues.* Leader Greg Binns.

FIELD REPORTS

2 Rainbow lorikeets, Sebastopol. Approximately 50 black and yellow hover flies, *Syrphidae sp*, around daisy bush, Durham Lead. 2 eastern barred bandicoots and a barn owl seen while spotlighting at Mooramong with Adam Merricks, Brian Andrews. Numbats are now back in SA parks, Lyndsay Fink. 10 -15 Striated pardalotes, digging nesting tunnels in edge of old quarry, Long Point Flora Reserve, 3rd Dec, John Gregurke. Square tailed kite, nest and 1 young also Wedge tailed eagle with nest and 1 young, both at Mt Sugarloaf (Mt Cole), 3rd Dec. Grey fantail with 4 young, 25th Nov., nested in large back porch at Miners Rest, Alan Morrison. On a very windy day, two yellow rumped thornbills were hopping in unison along a barbed wire fence. They made three hops along the wire, then rose in

unison over the barb and continued on their way to the end of the fence line and always landing back perfectly on the wire. 7th Nov, Pat Murphy. A green and yellow flower spider probably *Diaea variabilis* found in garden by Claire Dalman, bought to meeting, but lost by me before I could make a positive identification! BDA.

Little whip snake
Unechis (Rhinoplocphalus) flagellum
(McCoy, 1878)



From: Snakes of Aust'. by Mirtschin & Davis.

Reported by Lyndsay Fink at the August meeting. He wanted to know why there was a ? after Little, in the September newsletter Field Reports. I put it there because I didn't know, at the time, if the word little referred to the actual name or perceived size. Lyndsay has clarified the matter. Also, it wasn't an immature brown snake. - its identification was confirmed by Greg Parker! BDA.

AN APPROACH TO THE STUDY OF INVERTEBRATES

Dave King started by saying that his earliest memory, is of going to London Zoo and seeing a tarantula spider there! Not surprisingly he grew up to be interested in spiders!

Later in life he joined the Geelong FNC. He soon realized that they were mainly interested in birds and flowers and subsequently he decided to 'make his own way' -with the study of spiders. Going out on your own causes a few problems, so as a compromise he also studied insects - some other people studied those! It soon became apparent that this meant his efforts were spread thinly over a wide range of arthropods - there are over 10,000 species of beetle alone! He recommended that people should specialise - even though he hadn't.

Photography tends to be difficult, due to the small size and mobility of spiders. He said that he made considerable progress when he bought a microscope. Identification is still a problem, but the key published by the Brisbane Museum is very useful.

Apart from simply keeping your eyes open, there are many ways of capturing invertebrates, they include :- pitfall traps - filled with alcohol if just overnight or 70% glycol (anti-freeze) if left for longer periods, beating foliage -as demonstrated by Bert Candusio at Heathcote, UV lamps -similar to bug zappers, spotlighting - spiders are largely nocturnal and have luminous eyes, turning over rocks and logs etc.

GFNC are at present surveying local cemeteries and Dave is helping with the survey of invertebrates. He makes wet collections in 80% ethyl alcohol and sends them to the Survey Branch of the Victorian Museum.

He said that belonging to various societies was useful and quoted the Victorian and Australian Entomological Societies and the Australian Arachnology Society.

We were then treated to slides of various spiders :- grey huntsman - with its eight eyes, badge, brown huntsman, daddy long-legs - which has six eyes, red-back, jumping, black house, spiny, garden orb-weaving, white tailed, wolf carrying egg sac, trap-door, underwater and water skimming etc. We were shown close up shots of a mygalomorph (primitive) spider with its downward striking fangs, unlike most spiders which have fangs with a pincer movement. We were shown various examples of webs.

We were then shown a good selection of insect slides.

At the end of his talk Dave answered questions, one which remained unanswered was Greg's Q :-"with insects being caught in the spider's web, how is it that the spider does not get stuck in its own web?" Margaret Martin wrote to me explaining that she had come across the solution at the Spiders Alive exhibition:- A. "Spiders grip their webs with the middle claw and a few bristles on the tips of their legs. Because they clean the tips of their legs regularly and keep them lubricated with oily secretions, they don't get stuck!"....Thanks Margaret!

A fine talk! Thanks Dave! Brian Andrews

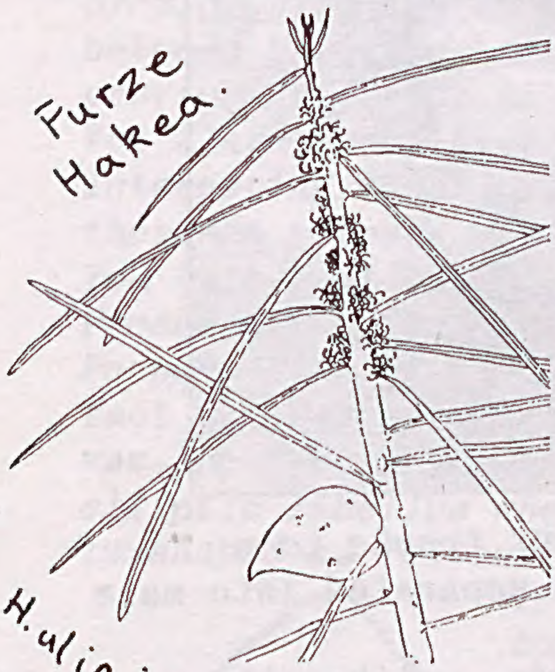
STONY CREEK EXCURSION

Seven cars with a total of fifteen people headed through Buninyong on the midland highway for an excursion in the 'Stony Creek' area. At Clarendon the convoy slowed as all eyes were to the right of the road. Before departing Pat had alerted everyone to the old Cobb & Co staging point. The bluestone building with vertical slits for defence purposes could easily be seen behind a farmhouse. How many others wondered why they hadn't previously noticed it?

The route to Stony Creek was along the Meredith - Durdidwarrah Road with possibly two wedgetailed eagles sighted along the road. Turning right at the Geelong - Ballan Rd, then right again just past the Upper Stony Creek Reservoir onto the Steiglitz - Durdidwarrah (or Stony Creek) road led to the first stop just after the swampy area was passed. First on the agenda was morning tea, but not alone, as the patrolling Anakie CFA paused to solicit donations from a somewhat trapped clientele. They pulled up moments after a candle had been lit on Barbara's birthday cake (Helen Burgess's sister).

The first walk was a backtrack along the road between the Upper Stony Creek reservoir and adjacent wetland on the south east side of the road, fringed on the far side with so many grass trees that it looked like a plantation was being established. Observations included : crimson rosella, 3 black duck with four young and a pair of chestnut teal, blue wrens, sacred kingfisher and spotted pardalote.

Back to the Geelong Road to the second stop just past the turn. This time the flora featured with noted observations being: Olearia ramulosa (Twiggy Daisy Bush - complete with green beetle), Dianella revoluta (Black Anther Flax Lily), Wahlenbergia, Helichrysum scorpioides, Pimelea, Chocolate Lily, Goodenia geniculata and Yellow Rush Lily.


Furze Hakea.

H. ulicina. ~ J. Galbraith Wild Flowers of S.E. Aust.

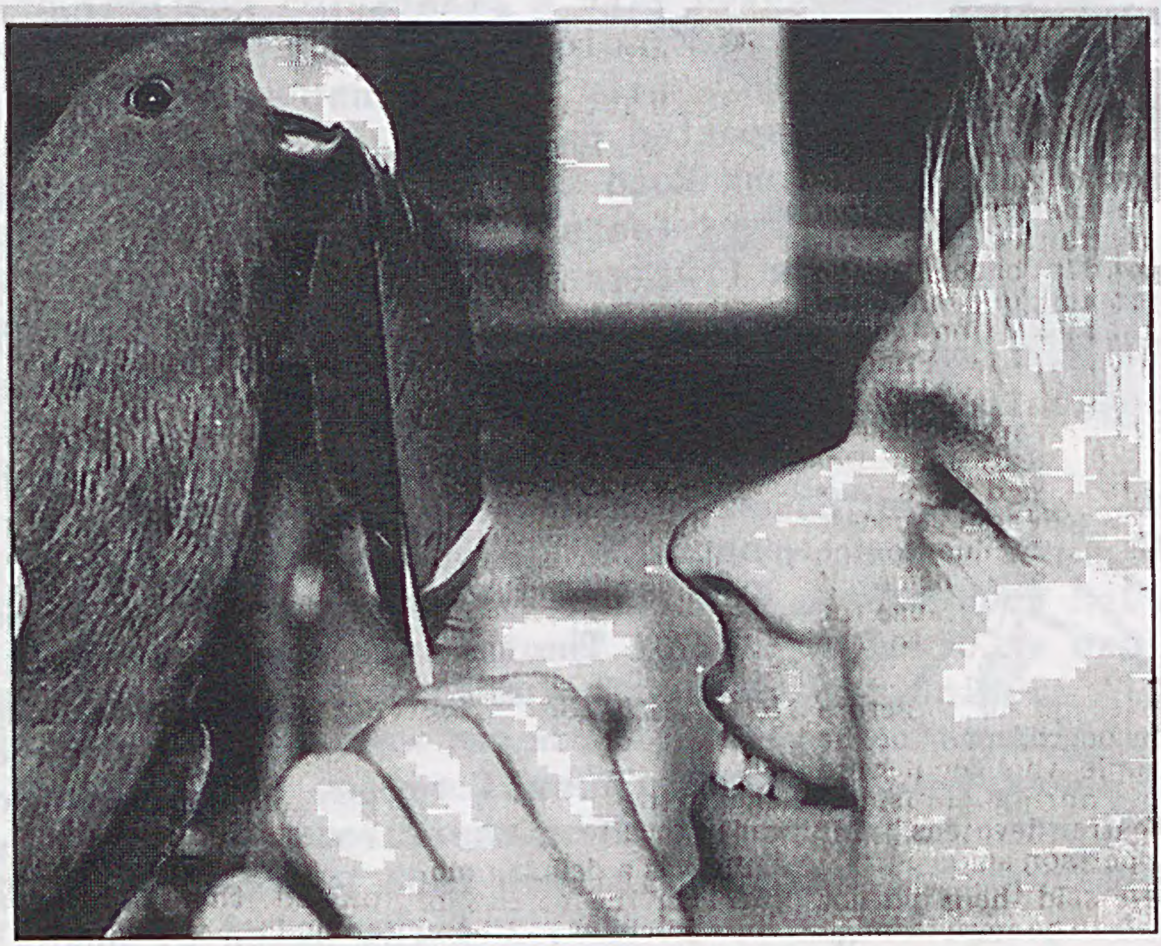
The third stop was on the right hand side of the Geelong - Ballan Road opposite 'Watershed & Game Sanctuary Gate 8' in a recently fire damaged area. The feature was Argentipallium obtusifollum (Blunt Everlasting Daisy) but also noted was the regeneration of Banksia and Correas, which were doing well after the fire. Other observed flowers were Blue Pincushion, Yellow Wedge Pea, a large patch of Hakea ulcina, Kennedia prostrata (not flowering) and Pultenaea pedunculata.

The final destination was along Switch Road to the Stony Creek picnic reserve area, an ornithologist's delight. The highlight of the day was nests with young visible. Right in a tree in the middle of the car park was a Blackfaced Cuckoo Shrike's nest with three good-sized young. Above the dam an Olive Backed Oriole nest, again with three young was viewed and also near the reservoir a honeyeater's nest with two brown eggs. Other nests and birds seen were Brown Tree Creeper & nest, Sacred Kingfisher nest, Dusky Wood Swallow, Satin flycatcher nest, Crimson Rosella, Rufous Whistler, White-naped Honeyeater, pair Blue Wrens, Grey Thrush, Black Faced Cuckoo Shrike, Yellow Tufted Honeyeater, White Eared Honeyeater, Brown Headed Honeyeater and a Sittella. Not to be out done, the vegetation had people on their knees about 150m along the track to see Scutellaria humilis (Dwarf Skullcap).

The day finished with a bar-b-cue tea with crimson rosellas joining in and eating hand fed bread, watched by a Brown Treecreeper while Koalas were heard in the background.

Thanks to Lyndsay Fink for organising the day and Pat and Bill Murphy for their leadership on the day. Peter Dalman

FROM THE PAPERS - GENETIC FEATHER IN CAP



BIRDS of a feather may flock together, but thanks to a scientific breakthrough, they can now be separated into male and female.

The sex of many of the world's birds, unlike other wildlife, can't be determined by sight.

However, geneticists at Monash University have developed a world first DNA test to determine the sex of birds such as cockatoos, lorikeets and rosellas from their feathers.

The technology is a boon for efforts to increase bird numbers in endangered species, allowing zoos better control over their breeding programs.

Monash University geneticist Vern Muir said the new technology also had unexpected benefits for humans.

For the first time, human hair can be DNA-tested to allow ancestry to be traced through male genes without the need for maternal samples.

Mr Muir said an entire genetic history could be traced from a single strand of hair, replacing the need for a blood sample.

"This has very big potential," he said. "once you complete the DNA sequence, you can determine the whole human (genetic) identification."

By Greg Thom, science reporter.
Submitted by Bob Curtain.

PAT'S ORCHID

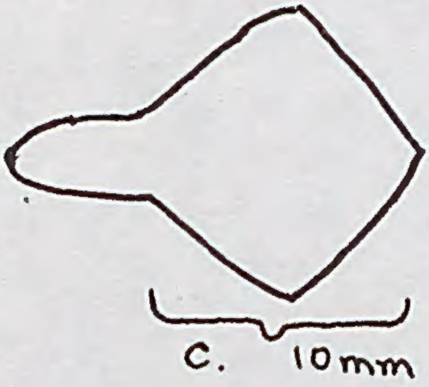
On our October mid-month excursion we found some orchids which caused some excitement and some confusion! Were they dainty bird orchids, *C. trapeziformis?* Pat sent a specimen to the National Herbarium of Victoria to settle the issue. Here is the reply:-

Dear Mrs Murphy,

The orchid sent for identification has been examined by Jeff Jeanes. It is a Bronze Bird-orchid Chiloglottis X pescottiana, a natural hybrid between C. valida and C. trapeziformis. All previous records, as mapped in Flora of Victoria Vol 2 are from eastern Victoria, so this is an interesting find. Thank you for the specimen and thorough notes.

You have mentioned C.valida at the same site. Presumably C. trapeziformis is also present. Perhaps some of the plants you discovered were in fact C. trapeziformis while the one you collected was the hybrid. Your specimen has a more or less elliptic labellum whereas that of C. trapeziformis is shaped as follows:-

ROYAL
BOTANIC
GARDENS
MELBOURNE



If you find C. trapeziformis, we would appreciate a specimen, unless you feel it is too scarce to justify collection. It is known to occur, not too far south of the Enfield area. However your site would be a new locality as far as we are aware.

Sincerely, John Reid, Identifications Botanist. ...Thanks Pat!...BDA

DECEMBER POSER--- WHY KOALA TWINS ARE SO RARE.

Koala expert Frank Carrick of the University of Queensland said the incidence of koala twins was exceedingly rare.

"I've never seen twins before although it is in the texts. We've got no idea how often twins are born or survive," Dr Carrick said.

Normally, a koala will give birth to a jelly bean sized baby while still suckling or having just weaned a sibling born the year before.

The young are about 19mm in length and weigh about 0.5g.

Although koalas have two teats in the pouch, babies attach and suckle only one which becomes elongated with use.

Scientists theorise that if twins are born the following year, only one teat will be small enough for the newborn.

"This means that, generally,only one twin will survive because it is mechanically impossible for the other to attach to the enlarged teat," Dr Carrick said.

"Presumably in this case, the koala has either not bred in the previous season or lost her young prematurely so both teats were small when the twins were born."

______From the Herald Sun,19/11/99 BDA

FEBRUARY POSER...DOLPHIN QUIZ.

Have a go at the following questions, don't be afraid to guess!

Q1 We are usually born head-first, what about dolphins? Why?

Q2 What unwanted items found their way into dolphin diets as a result of cruise ship activities? What was the solution?

Q3 Dolphins need their sleep but, unlike humans. they need to be conscious to breathe. How do they meet the two requirements at the same time?

Q4 On the average how long does a bottlenose dolphin stay under water at any one time? What is the maximum time?

Q5 Offshore, how deep can dolphins dive?

Q6 Humans can hear sounds up to a frequency of just over 20kHz, what about dolphins?

Q7 What chance have we got of seeing a porpoise during our bay trip?

Q8 What is the name of the institution that studies dolphins in the bay? BDA

THE TRUTH ABOUT ANTING !

If you are still thinking about the July Poser concerning anting you may like to read the chapter on the subject in 'Bird Wonders of Australia' by Alec Chisholm, 1956. BDA